



# South Coast Air Quality Management District

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## COMPLIANCE ADVISORY

Date: November 13, 2009

To: RECLAIM Facilities with Major Sources and CEMS Vendors

Subject: Mass Emission Rate Calculation for RECLAIM Major Sources

Based on the most recent audits, the South Coast Air Quality Management District (AQMD) has discovered that some continuous emission monitoring systems (CEMS) at RECLAIM facilities are not determining mass emission rates in accordance with the method specified under AQMD Rules 2011 and 2012. The AQMD specified the appropriate methods to be used in our previous Compliance Advisory issued to RECLAIM facilities on March 17, 2006. The purpose of today's Compliance Advisory is to not only clarify the mass emission rate calculation methodology for RECLAIM major sources, but also to advise facilities to confirm that the correct logic is used in compliance with the RECLAIM protocols and to make any necessary changes, to the mass emission rate calculation methodology employed by their CEMS. This notice is also to inform you that such changes to CEMS computer software must be implemented by **January 1, 2010** to ensure emission calculations are performed in adherence to the RECLAIM Protocols.

AQMD Rules 2011 and 2012 (Appendix A, Chapter 2(B)(1) – Information Required for Each 15-Minute Interval and Chapter 2(B)(5)(c) – Requirements for Valid Data Points) require that all valid stack flow data obtained from the monitors in a 15-minute period are to be averaged to obtain an average stack flow value for that 15-minute period. Similarly, these same rules also require that all valid concentration data obtained from the monitors for each 15-minute period are to be averaged to obtain an average concentration value for that 15-minute period. The mass emission rate for that 15-minute period is then to be calculated from the period's average stack flow value and average concentration value using the applicable equations in Chapter 2(B)(1). Pursuant to Rules 2011 and 2012, Appendix A, Chapter 2(B)(2) – Hourly Calculations, valid hourly averaged concentration, stack flow, and mass emission rate values are each then to be calculated by averaging the four corresponding 15-minute period average concentration, stack flow, and mass emission rate values, respectively. The daily mass emission rate, per Rules 2011 and 2012, Appendix A, Chapter 2(B)(3) – Daily Calculations, is then calculated by summing the twenty-four hourly mass emission rate values. *It is **not** acceptable to calculate the mass emission rate for a 15-minute or an hour period by calculating a mass emission rate value for each pair of valid concentration and exhaust flow data points collected during a 15-minute or an hour period and then averaging those mass emission rates.* For further illustration, an example calculation is provided on the back of this advisory or can be downloaded from the AQMD web page ([www.aqmd.gov/reclaim/cemsexample.pdf](http://www.aqmd.gov/reclaim/cemsexample.pdf))

If you know of any other person(s) (e.g. your CEMS vendor) that may be affected by this advisory, please forward a copy of this advisory or alert them of this matter. Finally, any questions regarding this notice should be directed to Mr. Mitch Haimov, Air Quality Analysis and Compliance Supervisor, at (909) 396-3129.